CR 00-046 PATENT

Amendments to the Claims - Current Status of Claims

(Currently Amended) A method of forming a vacuum microelectronic device comprising:

forming at least one electron emitter on a substrate;

applying a first conditioning electric field to move a portion of the at least one electron emitter in a direction toward the first conditioning electric field, wherein the conditioning electric field is of a sufficient strength to maintain the at least one electron emitter in the direction of the conditioning electric field after removing the conditioning electric field.; and

maintaining the at least one electron emitter in the direction after removing the first conditioning electric field.

- 2. (Currently Amended) The method of claim 1 wherein applying the first conditioning electric field includes applying the first conditioning electric field to have a value of at least 0.2 to 50 volts per micro-meter, and further including extracting a current from the at least one electron emitter wherein the at least one electron emitter has an internal current density of at least 1X10⁴ amperes per square centimeter.
- 3. (Currently Amended) The method of claim 1 further including subsequently operating the at least one electron emitter using a second an operating electric field having a value that is less than the value of the first conditioning electric field.

CR 00-046 PATENT

4. (Currently Amended) The method of claim 3 wherein using the second operating electric field includes using the second operating electric field having a value that is less than ninety percent of the value of the first conditioning electric field.

5. (Currently Amended) The method of claim 1 wherein applying the first conditioning electric field includes using a sequence of alternately applying and removing the first conditioning electric field.

 (Original) The method of claim 1 wherein forming at least one electron emitter on a substrate includes forming at least one nanotube emitter on the substrate.

Claims 7-20 (Canceled)